

Notice of Allowability

Application No.

10/646,888

Examiner

Victor J. Taylor

Applicant(s)

CARPENTIER, BERNARD

Art Unit

2863

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 12 April 2005.
2. ☒ The allowed claim(s) is/are 1, 2 and 4.
3. ☒ The drawings filed on 12 April 2005 are accepted by the Examiner.
4. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☒ All b) ☐ Some* c) ☐ None of the:
 1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|--|--|
| 1. <input type="checkbox"/> Notice of References Cited (PTO-892) | 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 6. <input type="checkbox"/> Interview Summary (PTO-413),
Paper No./Mail Date _____. |
| 3. <input checked="" type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date <u>10</u> | 7. <input type="checkbox"/> Examiner's Amendment/Comment |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit
of Biological Material | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| | 9. <input type="checkbox"/> Other _____. |

DETAILED ACTION

Drawings

1. The drawings were received on April 12 2005. These drawings are approved.

Response to Arguments

2. Applicant's arguments, see the new drawing and amendments to the specification, filed 12 April 2005, with respect to the objection to the drawing have been fully considered and are persuasive. The objection to the drawing of 12 January 2005 is moot and has been withdrawn.
3. Applicant's arguments, see the amendments to the abstract, filed 12 April 2005, with respect to amended abstract have been fully considered and are persuasive. The objection to the abstract of 12 January 2005 is moot and has been withdrawn.
4. Applicant's arguments, see the amendment to the specification and the IDS, filed 12 April 2005, with respect to the objection to the specification and the objection to the listing of references in the specification under 37 CFR 1.98 (B) have been fully considered and are persuasive. The objection to the disclosure and the listing of references in the specification of 12 January 2005 is corrected and is moot and has been withdrawn.
5. Applicant's arguments, see the arguments and amendment of record, filed 12 April 2005, with respect to the method to estimate the volume ratio of gas to oil in the fluid of a well during the drilling of that oil well and the argument for the steps to determine the gas volume by measuring the ratio R between a volume of gas produced

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and a corresponding volume of drilled rock combined with the arguments for the method steps to compute oil volume by measuring the total organic carbon content in the drilled rock data with the arguments of record on page 10 and page 11 convince the examiner that the cited claim limitation are allowable over the cited art of record and have been fully considered and are persuasive. The 102 (b) rejection of 12 January 2005 is moot and has been withdrawn.

6. Applicant's arguments see the response filed on 12 April 2005 with respect to the typo listing the incorrect patent number in paragraph 8 of the office action on 12 January 2005 and citing US 6,031,548 in the rejection as noted by the applicant and regarding the correct cited art of US 5,612,493 in class 73/152.55 by Alexandria have been fully considered and are persuasive and is made of record. The examiner thanks the attorney of record for bringing this typo to the examiners attention.

Allowable Subject Matter

7. Claims 1-2 and 4 are allowed.

8. The following is a statement of reasons for the indication of allowable subject matter:

Independent claim 1 a method for estimating the volume ratio R of gas to oil (GOR) in the wellbore fluids during the drilling with method steps for "determining the volume of gas (Vg) contained in the drilling fluids by measuring a ratio between a volume of gas produced and a corresponding volume of drilled rock"...[and] with the steps for "determining the volume of oil (Vo) by measuring the total organic carbon (TOC) in the drilled rock while taking account of the physical characteristics of the drilled

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rock and the oil under the surface conditions"...[and/or] in combination with the explicit steps for "determining the volume ratio (GOR) by calculating the ratio of the previously determined volumes of gas and oil" as amended and argued in the response of record on 12 April 2005 is not found in the cited art of record.

It is these limitations expressed in each of these claims and not found, taught, or suggested in the prior art of record, that makes these claims allowable over the prior art.

Claims 2 and 4 are variously dependent on the allowed independent claim 1 and are allowed at least for the reasons cited above.

Conclusion

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Victor J. Taylor whose telephone number is 571-272-2281. The examiner can normally be reached on 8:00 to 5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John E. Barlow can be reached on 571-272-2863. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

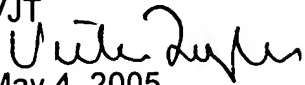
10. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

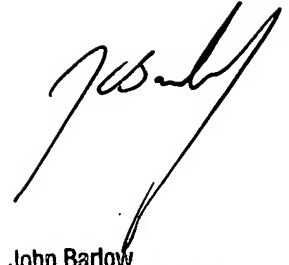
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VJT


May 4, 2005.



John Barlow
Supervisory Patent Examiner
Technology Center 2800